ELSEVIER

Colloids and Surfaces
A: Physicochemical and Engineering Aspects 105 (1995) 345–346

COLLOIDS AND SURFACES A

Contents of Volume 105

(Abstracted/indexed in: Chemical Abstracts; Current Contents; Physical, Chemical & Earth Sciences; INSPEC; PASCAL/CNRS)

Special Issue: In honor of Robert Eischens: A selection of papers presented at the 208th ACS meeting 'Infrared Studies of Surface and Adsorbed Species'

Preface: Robert Eischens – A pioneer in the application of infrared spectroscopy in surface science vii

Heterogeneity of hydroxyl groups in zeolites studied by IR spectroscopy
J. Datka, M. Boczar and B. Gil (Cracow, Poland) 1
The origins of multiple bands in the infrared spectra of carbon monoxide adsorbed on metal surfaces
R.G. Greenler and R.K. Brandt (Milwaukee, WI, USA) 19
FT-IRAS of adsorbed alkoxides: ethoxides on Cu(111)
S.C. Street (Urbana, IL, USA) and A.J. Gellman (Pittsburgh, PA, USA) 27
Reactivity of adsorbed CO toward C_2H_4, H_2, and NO on the surface of supported rhodium catalysts
S.S.C. Chuang, R. Krishnamurthy and C.-D. Tan (Akron, OH, USA) 35
The surface structure and reactivity of black carbon
D.M. Smith and A.R. Chughtai (Denver, CO, USA) 47
An infrared study of support effects on the interaction of dihydrogen and dinitrogen with supported rhodium films
Z. Pei, T.H. Fang and S.D. Worley (Auburn, AL, USA) 79
Early days in the infrared study of adsorbed molecules
R.P. Eischens (Bethlehem, PA, USA) 87
Alkylchlorosilane reactions at the silica surface
M.L. Hair and C.P. Tripp (Mississauga, Ont., Canada) 95
An FT-IR–ATR spectroscopic study of the spontaneous polymerization of pyrrole in iron-exchanged montmorillonite
P.W. Faguy, R.A. Lucas and W. Ma (Louisville, KY, USA) 105
Adsorption and decomposition of nitrous oxide on zirconia nanoparticles
T.M. Miller and V.H. Grassian (Iowa City, IA, USA) 113
FT-IR analysis of borate-promoted Ni–Mo/Al_2O_3 hydrotreating catalysts
E.C. DeCanio and J.G. Weissman (Beacon, NY, USA) 123
An infrared spectroscopy study of 1-butene and its isomers adsorbed onto 12-tungstophosphoric acid/SiO_2
S. Gao and J.B. Moffat (Waterloo, Ont, Canada) 133
Infrared spectroscopy of supported metal oxide catalysts
I.E. Wachs (Bethlehem, PA, USA) 143
Structure and orientation of oleic acid adsorbed onto silica gel
G. Blyholder, C. Adhikar and A. Proctor (Fayetteville, AR, USA) 151

Vol. 105 Nos. 2/3

Double chemical modification of the rutile surface
I.A. Polunina, S.S. Mikhailova, A.A. Isirikyan and N.S. Ovchinnikova (Moscow, Russia) 159
Study of acid–base surface properties of pyrogenic γ-aluminium oxide
L.F. Sharanda, A.P. Shimansky, T.V. Kulik and A.A. Chuiko (Kiev, Ukraine) 167

Thermodynamic and kinetic study on protolytic reactions at the surface of porous matrices
B.V. Zhmud (Jena, Germany) and A.A. Golub (Kiev, Ukraine) 173
Hydrothermal modification of silica gels (xerogels). 1. Effect of treatment temperature on their porous structure
R. Leboda, E. Mendyk, A. Gierak (Lublin, Poland) and V.A. Tertykh (Kiev, Ukraine) 181
Hydrothermal modification of silica gels (xerogels). 2. Effect of the duration of treatment on their porous structure
R. Leboda, E. Mendyk, A. Gierak (Lublin, Poland) and V.A. Tertykh (Kiev, Ukraine) 191
Flocculation of cellulosic fibres following addition of cationic starch
M. Björklund and L. Wågberg (Sundsvall, Sweden) 199
Changes in zeta potential of TiO_2 and $CaCO_3$ suspensions treated with a radiofrequency electric field as measured with a ZetaPlus instrument
E. Chibowski and L. Hołysz (Lublin, Poland) 211
An experimental study of the transport and capture of colloids in a porous medium subjected to step increases in concentration
E. Rodier and J. Dodds (Nancy, France) 221
UV/vis spectroscopic investigations of micellisation of homologous N-alkyl betaines using the dye indicator $E_T(30)$
J. Kriwanek and R. Miller (Berlin-Adlershof, Germany) 233
Size and compositional studies of core–shell latexes using flow and thermal field-flow fractionation
S.K. Ratanathanawongs, P.M. Shiundu and J.C. Giddings (Salt Lake City, UT, USA) 243
A reaction between aluminum chloride and octyldimethylmethoxysilane
S.E. Friberg, A. Al-Bawab (Potsdam, NY, USA), J. Sjöblom (Bergen, Norway), G. Farrington (Philadelphia, PA, USA) and W. Nie (Avon, France) 251
Adsorption equilibria in surface force balance studies
B.A. Pethica (New York, NY, USA) 257
Influence of a cationic surfactant on the phase behavior of $C_{12}E_4$/hexanol/water system at low surfactant concentration
M. Valiente (Madrid, Spain) 265
A physicochemical study of oxygen plasma-modified polypropylene
N. Shahidzadeh-Ahmadi, J. Amouroux, F. Arefi-Khonsari (Paris, France), M.M. Chehimi and M. Delamar (Paris, France), N. Foulon-Belkacemi (Gif-Sur-Yvette, France) 277
Studies of silica gel surface wetting phenomena by means of controlled-rate thermal analysis
P. Staszczuk (Lublin, Poland) 291
Effect of substrate hydrophobicity and electrolytes upon the micellar hydrolysis of *p*-nitrophenyl esters
C. Bobicã, D.F. Anghel and A. Voicu (Bucharest, Romania) 305
Monolayer formation on silica and mica surfaces from *n*-alkanol melts studied by scanning force microscopy
E. ten Grotenhuis, J.C. van Miltenburg and J.P. van der Eerden (Utrecht, The Netherlands) 309
Solubilization of phenol and benzyl alcohol by cationic and anionic surfactant micelles
S.S. Shah, M.A. Awan, M. Ashraf and S.A. Idris (Islamabad, Pakistan) 319
The interaction of iron(III) species with galena surfaces
C.A. Prestidge, W.M. Skinner, J. Ralston and R.S.C. Smart (The Levels, Australia) 325

Author Index 341
Subject Index 342
Contents to Vol. 105 345